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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/546,089	04/10/2000	David S. Wehrle	00AB078	2586

7590 08/30/2006

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EXAMINER

RAHMAN, FAHMIDA

ART UNIT PAPER NUMBER

2116

DATE MAILED: 08/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/546,089

Applicant(s)

WEHRLE ET AL.

Examiner

Fahmida Rahman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 08 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4, 6, 7-12, 18-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4, 6, 7, 9-12 and 18-21 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) 1-3 and 13-17 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 April 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to communications filed on 8/8/2006.
2. Claims 4, 6-12 have been amended, claim 5 has been canceled, claims 18-21 have been added. Thus, claims 4, 6-12, 18-21 are pending.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 6, 18, 19 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9 of U.S. Patent No. 7080150. Although the conflicting claims are not identical, they are not patentably distinct from each other because both disclose a communication network with two protocols, wherein the first

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protocol is to enable the I/O module and the second protocol is to provide the communications to the I/O module. For claim 1 of the pending application, the Patent disclosed the enablement of one other I/O module to form an I/O group in claim 2. Claim 6 of pending application is disclosed in claim 8 of the Patent. The limitations of claim 18 and 19 of the pending application would be found in claim 1 of the Patent.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 4, 7, 18-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Crump et al (US Patent 6484206).

For claim 4, Crump et al teaches the following limitations:

An adaptable control system for providing network communications (Fig 1 is an adaptable control system as it is adapted to many protocols and Fig 1 is a communication network), comprising::

- a physical media (110) for providing communications to at least one I/O module (114), the physical media includes a first protocol (TCP/IP) and a second protocol

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(X.25), the first protocol to enable the at least one I/O module to receive the network communications (TCP/IP is to enable 118 to receive the communications) and the second protocol (X.25) to provide the network communications to the at least one enabled I/O module (X.25 provides communications to 110, which in turn provides the communications to 114. Therefore, X.25 provides communications to 110);

- and the at least one I/O module (114) enables at least one other I/O module (118) to form an I/O group via the first protocol (communications destined to 118 should go through 114. Therefore, 114 should enable 118 to receive communications from 114 via TCP/IP).

For claim 7, 114 comprises interface to communicate with 118.

For claim 18, TCP/IP client 118 is added sequentially to 114.

For claim 19, 114 and 118 are automatically configured.

For claims 20 and 21, the physical locations of 114 and server 118, and node addresses corresponding to the respective physical locations must be determined. The TCP/IP protocols require node address depending on physical locations.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the *invention was made*.

Claims 6, 9, 10, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crump et al (US Patent 6484206).

For claim 6, Crump et al do not expressly teach the second protocol being one of DeviceNet, EtherNet, or ControlNet. Official notice is taken that the second protocol being one of a specific type such as DeviceNet, EtherNet, or ControlNet has been quite well known and each of the protocol type's advantages has also been quite well known to one of ordinary skill in the art at the time of the invention, thus rendering it obvious to utilize such protocols.

For claim 9, TCP/IP network typically comprises router, which is an adapter.

For claim 10, routers typically include processors.

For claim 12, I/O module 114 typically comprises router that includes a processor for receiving TCP/IP as input protocol and TCP/IP as output protocol.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Crump et al, in view of Burke et al, patent no. 6,052,382.

For claim 11, it is noted that Crump et al do not expressly teach the adapter including an Offlink Connection Manager object, a node list, and an I/O data table. Burke et al teach the adapter includes an Offlink Connection Manager object, a node list, and an I/O data table (Figure 1 and col. 5 lines 7-40).

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Crump et al and Burke et al because both are commonly directed to utilizing communications interface adapter, and Burke et al's adapter having an Offlink Connection Manager object, a node list, and an I/O data table, when incorporated into Crump's adapter, would have enabled handling of additional peripherals in the system and communications between them utilizing the Offlink Connection Manager object, the node list, and the I/O data table in the peripheral adapter.

Allowable Subject Matter

Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed on 8/8/2006 are moot in view of new grounds of rejections.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fahmida Rahman whose telephone number is 571-272-8159. The examiner can normally be reached on Monday through Friday 8:30 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on 571-272-3670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Fahmida Rahman
Examiner
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